

Remarks

Claims 22-27 and 29-31 are pending.

Claims 25-27 and 30 are presently withdrawn.

Claims 22 and 29 are amended.

Claims 23, 24 and 31 are as previously presented.

Claim 22 is amended to delete from the definition of R_4 the terms "unsubstituted phenyl" and " C_6-C_{10} aryl" and to delete from the definition of R_6 the term " C_6-C_{10} aryl". Claim 22 is also amended for clarity inserting the phrase "surface of a" immediately prior to the term "plastic" in line 2. Support is inherent in the claim.

Claim 29 is amended to delete from the definition of R_4 the term "unsubstituted phenyl".

No new matter is added.

Rejections

Claim 22 and dependent claims are rejected under 35 US 112 second paragraph as it is unclear to the Examiner whether only the surface of the plastic is contacted with the anti-microbial.

Applicants respectfully traverse the rejections.

The amendments above make clear that the instant method involves "contacting said surface of a plastic". That is, the antimicrobial is brought into contact with the surface of a formed plastic article. The question was also raised as to whether the pores of a porous plastic comprise the surface. Applicants view the surface of a plastic article to be the outside "skin" of a plastic article, that is, the part of the plastic that is in contact with its external environment. The surface of the plastic therefore includes pores if such pores place the surface of the plastic in contact with the environment. Pores that are completely encircled by the plastic bulk, for example, an interior bubble that has no external contact with the environment could not be readily contacted and would not be part of the surface.

Applicants respectfully submit that the 35 USC 112 second paragraph rejections of claim 22 and dependent claims are addressed and are overcome and kindly ask that the rejections be withdrawn.

Claims 22 to 24, 29 and 31 are rejected under 35 USC 103(a) as being obvious over Sunley et. al., US 4,116,674 and Ghosh, J. Indian Chem Soc, 1983, p 512-513.

Applicants respectfully traverse the rejections.

The Examiner states that the compounds of Sunley are similar to the instantly elected compounds. Ghosh discloses aryl amino compounds in the anti-microbial treatment of plastics. The Examiner believes that it is obvious that the compounds of Sunley would be expected to perform as well as the compounds of Ghosh when used in the applications of Ghosh.

Applicants respectfully point out that Ghosh teaches only aryl-amino compounds whereas the compounds of the instantly amended claims are alkyl amino compounds. Applicants respectfully contend that there is no reason to expect that alkyl amino compounds would have the same anti-microbial activity as aryl amino compounds, especially given the complexity and uncertainty of the art, and that the substitution of one for the other is far from obvious.

Sunley discloses solely herbicidal activity of the compounds therein and there is no suggestion of antimicrobial activity. Herbicides are used to kill unwanted plants and can be grouped by activity, use, chemical family, mode of action, or type of vegetation controlled. For example:

Contact herbicides are fast acting and destroy only the plant tissue in contact with the chemical, systemic herbicides are slower but ultimately more effective as they are translocated through the plant and are thus capable of controlling perennial plants.

Soil-applied herbicides are available which are applied to the soil and are taken up by the roots of the target plant. Soil-applied herbicides can be applied prior to planting, just before crops emerge or after crops emerge.

An antimicrobial kills or inhibits the growth of microbes such as bacteria, fungi, or viruses.

est:

There is no general expectation that a herbicide will also act as an antimicrobial and Sunley contains no suggestion that the herbicides therein have any antimicrobial activity.

Applicants respectfully aver that the cited art discloses herbicidal activity for compounds having an alkyl amino group bound in 2- and 4- position to the pyrimidine ring, and antimicrobial activity for compounds having an aryl amino group bound in 2- and 4-position to the pyrimidine ring. A person skilled in the art would therefore clearly not be guided to the antimicrobial use according to the instant invention. Furthermore, the instant application relates only to the treatment of plastic surfaces. Applicants contend that there is no teaching in the cited art that either class of compounds, arylamino or alkyl amino, could be effectively used for any reason on the surface of a plastic.

Applicants therefore respectfully maintain that without knowledge of the instant invention, one skilled in the art would have no expectation of the advantageous properties provided by the invention.

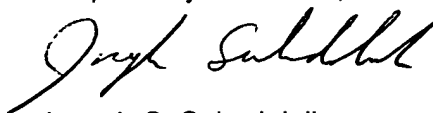
Applicants respectfully submit that the rejections of claims 22 to 24, 29 and 31 under 35 USC 103(a) over Sunley et. al., US 4,116,674 and Ghosh, J. Indian Chem Soc, 1983, p 512-513 are addressed and are overcome and kindly ask that the rejections be withdrawn and the claims be found allowable.

Applicants further kindly ask that upon finding claims 22 to 24, 29 and 31, which specifically encompass the elected species, allowable, that the Examiner rejoin the remainder of the selected invention, that is claims 25-27, and 30, and also find them allowable.

In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

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Respectfully submitted,



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